

CURRICULUM VITAE

NILS WARNOCK

Point Reyes Bird Observatory
4990 Shoreline Hwy
Stinson Beach, CA 94970
(415) 868-0371 x308
e-mail: nilsw@prbo.org

Present Position

Co-Director - Wetlands Program, Point Reyes Bird Observatory	2000-present
Senior Scientist - Point Reyes Bird Observatory	1998-1999

Education

Ph.D. Ecology, University of California, Davis and San Diego State University,	1994
B. A. Psychology, University of Colorado, Boulder,	1983

Post-Doctoral Experience

1994 - 1996.	Environmental and Resource Sciences, University of Nevada, Reno (with Dr. Lewis Oring) and Department of Biological Sciences, Simon Fraser University (with Dr. Fred Cooke)
1996-1997	Statistician (GS-9), US Forest Service, Corvallis, OR
1997-1998	Statistician (GS-9) - Forest and Rangeland Ecosystem Science Center, United States Geological, Corvallis, OR.

Teaching Experience

1988	Teaching Assistant, Dept. of Biology, San Diego State University, San Diego, CA. <i>Introductory Biology.</i>
1989	Lecturer, Dept. Biology, San Diego State University, San Diego, CA. <i>Field Methods in Ecology and Evolution.</i>
1989	Teaching Assistant, Dept. of Wildlife and Fisheries Biology, University of California, Davis. <i>Ornithology.</i>
1990-92	Teaching Assistant, Dept. of Wildlife and Fisheries Biology, University of California, Davis. <i>Field Methods in Wildlife Biology.</i>
1994	Lecturer, Dept. of Wildlife and Fisheries Biology, University of California, Davis. <i>Field Methods in Wildlife Biology.</i>
1995	Guest Lecturer, Ecology, Evolution and Conservation Biology, University of Nevada, Reno. <i>Avian Ecology.</i>
1996	Guest Lecturer, Environmental Resource Sciences, University of Nevada, Reno. <i>Principles of Environmental Resources.</i>

Graduate Students

1996	Guillermo Fernandez, M.Sc. student, CICESE, Ensenada, Mexico, graduated
1999	Catherine Hickey, M.Sc. student, Ecology, University of California, Davis
2000	Jennifer White, Ph.D. Student, Biology, University of Missouri, Columbia

Research Experience

- 1982-1983 Psychology Dept., University of Colorado. *Evolution of predatory behavior in rattlesnakes and cobras.*
- 1984-1987 Point Reyes Bird Observatory, Stinson Beach, CA. *Wintering ecology of shorebirds, breeding ecology of seabirds and marine mammals, ecology of breeding and migratory landbirds.*
- 1987 USDA Forest Service, Fresno, CA. *Breeding landbirds and comparative census techniques.*
- 1987-1988 Point Reyes Bird Observatory, Stinson Beach, CA. *Wintering shorebird ecology, breeding requirements and population dynamics of interior nesting Snowy Plovers.*
- 1988 United States Fish and Wildlife Service, Seward Peninsula, AK. *Breeding distribution and habitat requirements of the Bristle-thighed Curlew on Seward Peninsula, Alaska.*
- 1988-1992 University of California, Davis; San Francisco Bay area, CA *Biotic and abiotic factors affecting the distribution and abundance of Dunlin.*
- 1988-1989 Biology Dept., San Diego State University. *Estuarine restoration and enhancement*
- 1989 Point Reyes Bird Observatory, Stinson Beach, CA. *Abundance and distribution of shorebirds in San Diego County, CA and northern Baja California, Mexico.*
- 1990-1993 Troy Ecological Research Associates; Prudhoe Bay, AK *Impact of oil development on arctic breeding bird communities; Breeding and dispersal of Spectacled Eiders using radio and satellite telemetry.*
- 1992 University of California, Davis; San Francisco Bay, CA *Migration ecology of Western Sandpipers using radiotelemetry.*
- 1994-1996 University of Nevada, Reno; Honey Lake, CA *Life history strategies of breeding Killdeer; Post-breeding dispersal of Killdeer and American Avocets using radiotelemetry.*
- 1994-1996 Simon Fraser University; Ensenada, Mexico *Demography of a wintering Western Sandpiper population.*
- 1995-1996 University of Nevada, Reno; San Francisco, CA, Honey Lake, CA, Grays Harbor WA *Migration ecology and conservation of Western Sandpipers along the Pacific Flyway.*
- 1997-1998 Forest and Rangeland Ecosystem Science Center, Corvallis, OR *Local and metapopulation dynamics of western Great Basin shorebirds.*
- 1998-present Point Reyes Bird Observatory, Stinson Beach, CA *Ecology and conservation of Pacific Flyway birds: emphasis on endangered species, migration, wetland habitat restoration, and shorebird conservation.*

Publications

- Radcliffe, C.W., T. Poole, F. Feiler, N.D. Warnock, T. Byers, A. Radcliffe, and D. Chiszar. 1983. *Immobilization of mice following envenomation by cobras (Naja mossambica pallida).* Bull. Psychonom. Soc. 21:243-246.
- Warnock, N. 1989. *Piracy by Ring-billed gulls on Dunlins.* Wilson Bull. 101: 96-97.
- Warnock, N. 1990. *Apparent age-segregation of Dunlin within Bolinas Lagoon - a preliminary study.* Wader Study Group Bull. 60: 27-30.
- Warnock, N. and S. Warnock. 1993. *Attachment of radiotransmitters to sandpipers: review and methods.* Wader Study Group Bull. 70: 28-30. Reprinted 1993. Stilt 23: 38-40
- Warnock, N. 1994. *Biotic and abiotic factors affecting the distribution and abundance of a wintering population of Dunlin.* Ph.D. dissertation, University of California, Davis and San Diego State University.
- Warnock, N., G.W. Page and L.E. Stenzel. 1995. *Non-migratory movements of Dunlin on their California wintering grounds.* Wilson Bull. 107: 131-139.
- Warnock, N. and S. Schwarzbach. 1995. *Incidental kill of Dunlin and Killdeer by strychnine.* J. Wild. Diseases 31: 566-569.
- Iverson, G. C., S. Warnock, R. Butler, M. A. Bishop and N. Warnock. 1996. *Spring migration of western sandpipers along the Pacific coast of North America: a telemetry study.* Condor 98: 10-21.
- Warnock, N. 1996. *Local and regional differences in habitat utilization by Dunlins (Calidris alpina) as revealed by radiotelemetry; conservation implications.* In Shorebird ecology and conservation in the Western Hemisphere. (P. Hicklin et al., Eds.). International Wader Studies 8: 35-38.

- Warnock, N. D. and R. E. Gill, Jr. 1996. *Dunlin* (*Calidris alpina*). In *The Birds of North America* No. 203 (A. Poole and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington D. C.: The American Ornithologists' Union.
- Warnock, N. and L. W. Oring. 1996. *Nocturnal nest attendance of Killdeers: more than meets the eye*. *Auk* 113: 502-504.
- Butler, R. W., T. D. Williams, N. Warnock and M. A. Bishop. 1997. *Bird migration: an obligate requirement for wind-assisted flight?* *Auk* 114: 456-466.
- Johnson, O. W., N. Warnock, M. A. Bishop, A. J. Bennett, P. M. Johnson, and R. J. Kienholz. 1997. *Hawaii to Alaska migration by radio-tagged Pacific Golden-Plovers and their subsequent survival*. *Auk* 114: 521-524.
- Reed, J. M., N. Warnock and L. W. Oring (Eds.). 1997. *Conservation and management of shorebirds in the western Great Basin of North America*. *International Wader Studies* 9: 1-81.
- Reed, J. M., N. Warnock and L. W. Oring. 1997. *Censusing shorebirds in the western Great Basin of North America*. *International Wader Studies* 9: 29-36.
- Warnock, N., J. M. Reed and L. W. Oring. 1997. *Synthesis: shorebirds in the arid western Great Basin of North America*. *International Wader Studies* 9: 80-81.
- Warnock, N., G. W. Page and B. Sandercock. 1997. *Local survival of Dunlin *Calidris alpina* wintering in California*. *Condor* 99: 906-915.
- Bishop, M. A. and N. Warnock. 1998. *Migration of Western Sandpipers: links between their stopover areas and breeding grounds*. *Wilson Bull.* 110:457-462.
- Warnock, N. and M. A. Bishop. 1998. *Spring stopover ecology of migrant Western Sandpipers*. *Condor* 100: 456-467.
- Warnock, N., S. M. Haig, and L. W. Oring. 1998. *Monitoring species richness and abundance of shorebirds in the western Great Basin*. *Condor* 100:589-600.
- Buenrostro, A. A., N. Warnock, H. de la Cueva. 1999. *Wintering Western Sandpipers (*Calidris mauri*) at Estero de Punta Banda, Baja California, México*. *Wader Study Group Bull.* 88:59-63.
- Butler, R. W., T. D. Williams, M. A. Bishop and N. Warnock. 1999. *Reply to Hedenström and Weber*. *Auk* 116:563-564
- Takekawa, J. Y. and N. Warnock. 2000. *Long-billed Dowitcher (*Limnodromus scolopaceus*)* In *The Birds of North America*, No. 493 (A. Poole and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington D. C.: The American Ornithologists' Union.
- Warnock, N. 2000. *Book review - Gathering of angels, migrating birds and their ecology (K. Able, ed.)*. *Western Birds* 31:207-208.
- Warnock, N., and S. Warnock. 2000. *Waterfowl and shorebirds: Western Sandpiper *Calidris mauri**. Pages 296-300 in (P. Olofson, ed.). *Goals project 2000. Baylands ecosystem species and community profiles: life histories and environmental requirements of key plants, fish and wildlife*. Prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. San Francisco Bay Regional Water Quality Control Board, Oakland, CA.
- Fernández, G., H. de la Cueva and N. Warnock. 2001. *Phenology and length of stay of transient and wintering Western Sandpipers at Estero Punta Banda, Mexico*. *Journal of Field Ornithology* 72:509-520.
- Shepard, P. C. F., D. B. Lank, B. D. Smith, N. Warnock, G. W. Kaiser, and T. D. Williams. 2001. *Sex ratios of Dunlin wintering at two latitudes on the Pacific coast*. *Condor* 103:352-360.
- Warnock, N., and S. Warnock. 2001. *Sandpipers, phalaropes, and allies*. Pages 273-287 in *The Sibley guide to bird life and behavior*. Chanticleer Press, Inc., NY.
- Warnock, N., C. Elphick, and M. Rubega. 2001. *Shorebirds in the marine environment*. Pages 581-615 in (J. Burger and B. A. Schreiber, Eds.). *Biology of Marine Birds*. CRC Press, Boca Raton, FL.
- Kelly, J. P., N. Warnock, G. W. Page, and W. W. Weathers. 2002. *Effects of weather on daily body mass regulation in wintering Dunlin*. *Journal of Experimental Biology* 205:109-120.

Publications submitted or in preparation¹

- Bishop, M. A., N. Warnock and J. Y. Takekawa. *Phenology and interannual differences in use of stopover sites by migrating Western Sandpipers*

- Fernandez, G., H. de la Cueva, N. Warnock, and D. B. Lank. *Local survival rates of Western Sandpipers wintering in northwest Baja California, Mexico*. Auk. Accepted.
- Hickey, C., N. Warnock, and J. Y. Takekawa. *Space use by Black-necked Stilts in the San Francisco Bay Estuary*. Condor.
- Nebel, S., D. B. Lank, T. Below, F. Delgado, F. Estela, L. Evans Ogden, G. Fernández, B. Haase, B. Harrington, B. Kus, J. Lyons, F. Mercier, B. Ortego, P. O'Hara, J. Takekawa, S. Warnock, and N. Warnock. *Western Sandpipers (Calidris mauri) during the non-breeding season: spatial segregation on a hemispheric scale*. Auk. Accepted.
- Shuford, W. D., N. Warnock, and K. C. Molina. In press. *The importance of the Salton Sea, California to Pacific Flyway waterbirds*. Hydrobiologica.
- Shuford, W. D., N. Warnock, and R. L. McKernan. *Patterns of shorebird use of the Salton Sea and adjacent Imperial Valley, California*. accepted. Studies in Avian Biology.
- Takekawa, J. Y., N. Warnock, G. M. Martinelli, A. K. Miles, and D. C. Tsao. *Waterbird use of bayland wetlands in the San Francisco Bay Estuary: movements of Long-billed Dowitchers (Limnodromus scolopaceus) during the winter*. submitted to Waterbirds.
- Warnock, N. and M. A. Bishop. *Speed of migration of radiomarked Western Sandpipers*. In prep.
- Warnock, N., W. D. Shuford and K. Molina. *Annual distribution pattern of waterbirds at the Salton Sea, California, 1999*. accepted. Studies in Avian Biology.
- Warnock, N. *Dunlin species account*. Birds of Oregon: a general reference, Oregon State University Press. (final draft submitted)
- Warnock, N. *Western Sandpiper species account*. Birds of Oregon: a general reference, Oregon State University Press. (final draft submitted).
- Warnock, N., G. W. Page, M. Ruhlen, N. Nur, J. Y. Takekawa, and J. T. Hanson. *Management and conservation of San Francisco Bay salt ponds: effects of pond salinity, area, tide, and season on Pacific Flyway waterbirds*. submitted to Waterbirds.

¹All papers listed in prep. are completed drafts in review by co-authors unless otherwise noted.

Publications in Popular Journals

- Warnock, N. 1987. *Dunlin journal*. Point Reyes Bird Observatory Newsletter 76: 6-7.
- Warnock, N. and S. Warnock. 1996. *Tracking shorebirds*. Bird's-Eye View 4: 4-5.
- Warnock, N., S. Warnock and M. A. Bishop. 1997. *Marvels of migration: the northward flight of the Western Sandpiper*. Tideline 17: 1-3.
- Warnock, N. and M. A. Bishop. 1998. *Northwest passage*. Natural History Magazine 107: 50-53.
- Warnock, N. 1998-99. *Salton Sea studies: assessing the birds of an inland sea*. Point Reyes Bird Observatory Newsletter 115: 6.
- Warnock, N. 1999. *San Clemente Loggerhead Shrikes: a mixed success story for 1999*. Bird Calls 3:14.
- Warnock, N. 1999. *Sandpiper travels*. Point Reyes Bird Observatory Newsletter 117: 10.
- Warnock, N. 2000. *Habitat balancing act*. Point Reyes Bird Observatory Newsletter 122: 5.
- Warnock, N. 2001. *Tools for conservation: radio and satellite technology*. Point Reyes Bird Observatory Newsletter 126: 1 (also co-edited this newsletter).

Significant Reports

- Evens, J.G., G.W. Page, L.E. Stenzel, and N.D. Warnock. 1986. *Distribution, density and habitat of Black Rails in Marin county marshes*. A special scientific report of the Point Reyes Bird Observatory.
- Page, G.W., H.R. Carter and N.D. Warnock. 1986. *Number of beached oiled birds*. Sec. 3 in Impacts of 1986 San Joaquin Valley Crude oil spill on marine birds in central California. (G.W. Page and H.R. Carter, Eds.) A special scientific report of the Point Reyes Bird Observatory.
- Warnock, N., S.E. Griffin and L.E. Stenzel. 1989. *Results of the 22-23 April 1989 shorebird census in coastal wetlands of San Diego County and northern Baja California*. Report of the Point Reyes Bird Observatory.
- Warnock, N. and D. Troy. 1992. *Distribution and abundance of Spectacled Eiders at Prudhoe Bay, Alaska*. Report for BP Exploration, Anchorage, AK.

- Warnock, N. 1995. *Progress Report on Western Sandpiper Project: Estero de Punta Banda, Ensenada, Mexico October 1994 - February 1995*. CWS/NSERC Research Chair in Wildlife Ecology, Department of Biological Sciences, Simon Fraser University, Burnaby, Canada.
- Bishop, M.A. and N. Warnock 1995. *Conservation of Western Sandpipers Along the Pacific Flyway: Year-end Report, June 1995*. Report for National Fish and Wildlife Foundation, Washington, DC
- Warnock, N., H. de la Cueva Salcedo and L.W. Oring 1996. *Report on Western Sandpiper Project: Estero de Punta Banda, Ensenada, Mexico, 1994 - 1996*. CWS/NSERC Research Chair in Wildlife Ecology, Department of Biological Sciences, Simon Fraser University, Burnaby, Canada
- Warnock, N. and M.A. Bishop 1996. *Conservation of Western Sandpipers along the Pacific Flyway: summary report, 1995-1996*. National Fish and Wildlife Foundation, Washington, DC.
- Warnock, N. and M.A. Bishop 1996. *Spring migration of Western Sandpipers at the San Francisco Bay Estuary*. Report for Don Edwards San Francisco Bay National Wildlife Refuge, Newark, CA and San Francisco Bay Estuary Project, Ecological Services, USFWS, Sacramento, CA.
- Mader, T., and N. Warnock. 1999. *1998 population monitoring of the Loggerhead Shrike on NALF, San Clemente Island, California*. D.O.D., U.S. Navy, Natural Resources Management Branch, Southwest Div., Nav. Fac. Eng. Command, San Diego, CA.
- Shuford, W. D., N. Warnock, and K. C. Molina. 1999. *The avifauna of the Salton Sea: a synthesis*. Salton Sea Authority for U.S. Environmental Protection Agency grant # R826552-01-0.
- Shuford, W. D., N. Warnock, K. C. Molina, B. Mulrooney, and A. Black. 2000. *Avifauna of the Salton Sea: abundance, distribution, and annual phenology*. Final report for EPA Contract No. R826552-01-0 to the Salton Sea Authority. 78401 Highway 111, Suite T, La Quinta, CA 92253.
- Mader, T., N. Warnock, and W. Ostheimer. 2000. *1999 population monitoring of the Loggerhead Shrike on NALF, San Clemente Island, California*. D.O.D., U.S. Navy, Natural Resources Management Branch, Southwest Div., Nav. Fac. Eng. Command, San Diego, CA.
- Blackford, A.V., C. Couroux, H. Carlisle, J. Plissner, and N. Warnock. 2001. *Breeding Report: 2000 Population Monitoring of the Loggerhead Shrike on NALF, San Clemente Island, California*, D.o.D., U.S. Navy, Natural Resources Management Branch, Southwest Div., Nav. Fac. Eng. Command, San Diego, California.
- Warnock, N., M. A. Bishop, and J. Y. Takekawa. 2001. *Spring migration of Dunlin and dowitchers along the Pacific Flyway*. Unpublished progress report, Point Reyes Bird Observatory, Stinson Beach, CA 94970.

Talks

- Warnock, N., D. Chiszar and C. Radcliffe. 1983. *Prey - directed behavior in cobras and rattlesnakes*. Colorado - Wyoming Academy of Science, University of Wyoming.
- *Warnock, N. 1987. *Age related distribution in Dunlins*. Avian Studies Group, San Francisco, California.
- Warnock, N. 1991. *Local differences in habitat utilization by Dunlin (Calidris alpina)*. IV Neotropical Ornithological Congress, Quito, Ecuador
- *Warnock, N. 1993. *Habitat use by shorebirds in coastal California*. Western Hemisphere Shorebird Reserve Network and Manomet Observatory, Shorebird Management workshop, Sacramento National Wildlife Refuge, California.
- Warnock, N., and G. Page. 1993. *Population dynamics of Dunlin at Bolinas Lagoon: a 14 year study*. Western Section of the Wildlife Society, Monterey, California.
- Warnock, N., G. Page and L. Stenzel. 1993. *Regional movement patterns of Dunlin: a response to rain?*. American Ornithological Union, Fairbanks, Alaska.
- Warnock, N. 1993. *Survival rates of a wintering Dunlin population at a coastal estuary: a fourteen year perspective*. Colonial Waterbird Meeting, Arles, France and Wader Study Group Meeting, Ipswich, England
- *Warnock, N. 1994. *Biotic and abiotic factors affecting the distribution and abundance of Dunlin*. Sacramento State University, Sacramento California.
- *Warnock, N. 1994. *Winter ecology of Dunlin*. Canadian Wildlife Service, Reifel, British Columbia, Canada.
- *Warnock, N. 1994. *Winter ecology of Dunlin a long term study*. Centro de Investigacion Cientifica y de Educacion Superior de Ensenada, Ensenada, Mexico.

- Warnock, N. and M. A. Bishop. 1995. *Spring migration ecology of Western Sandpipers as revealed by radiotelemetry*. International Waterfowl Ecology Symposium and Wader Study Group Conference, Aveiro, Portugal.
- Warnock, N. and M. A. Bishop. 1995. *Migration strategies of radiomarked Western Sandpipers along the Pacific Flyway: 1995*. Pacific Seabird Group/Colonial Waterbird Meeting, Victoria, Canada.
- Buenrostro, A., H. de la Cueva, and N. Warnock. 1995. *Phenology of Western Sandpiper (Calidris mauri) in Punta Banda, Ensenada, B.C., Mexico*. Cooper Society Meeting, La Paz, Mexico
- Fernandez, G., H. de la Cueva and N. Warnock. 1996. *One year return rates of Western Sandpipers (Calidris mauri) to Estero Punta Banda, B.C., Mexico*. Cooper Society Meeting, San Diego, California.
- Oring, L., N. Warnock, L. Powers and S. Haig. 1996. *Dispersal decisions: how are they made and assessed?*. International Behavioral Ecology Conference, Brisbane, Australia.
- Oring, L., N. Warnock and L. Powers. 1996. *Philopatry and breeding success of Great Basin Killdeer*. Cooper Society Meeting, San Diego, California.
- Powers, L., N. Warnock and L. Oring. 1996. *Space-use patterns of Killdeer (Charadrius vociferus) during the breeding season at a Great Basin wetlands*. Cooper Society Meeting, San Diego, California.
- *Warnock, N. 1996. *Space use patterns of sandpipers: management and conservation implications*. Western Hemisphere Shorebird Reserve Network and Manomet Observatory, Shorebird Management workshop, Santa Nella, California.
- *Warnock, N. 1996. *Spring migration ecology of Western Sandpipers as revealed by radiotelemetry*. Western Sandpiper Working Group Meeting, Ensenada, Mexico.
- Warnock, N. and L. Oring. 1996. *Nocturnal incubation of Killdeer: more than meets the eye*. Cooper Society Meeting, San Diego, California.
- Warnock, N. and M. A. Bishop. 1996. *Interannual use of stopover sites by radiomarked Western Sandpipers along the Pacific Flyway: conservation implications*. Society for Conservation Biology, Providence, Rhode Island.
- *Warnock, N. and M. A. Bishop. 1997. *Migratory strategies of Western Sandpipers*. Putting Dynamic Models of Migration to the Test Symposium, Texel, The Netherlands.
- *Warnock, N. (featured speaker). 1997. *Avian migration: the flight of shorebirds*. The Oregon Shorebird Festival. Charleston, Oregon.
- Bishop and Warnock. 1998. *Spring stopover ecology of migrant Western Sandpipers*. American Ornithological Union, St. Louis, Missouri.
- Warnock, N. and S. Haig. 1998. *Species richness, abundance, and wetland use by shorebirds in the western Great Basin*. American Ornithological Union, St. Louis, Missouri.
- *Warnock, N. (featured speaker). 1998. *Avian migration: the flight of shorebirds*. The Grays Harbor Shorebird Festival. Grays Harbor, Washington.
- *Warnock, N. (featured speaker). 1999. *Shorebird migration along the Pacific Flyway*. US Fish and Wildlife's Flyway Festival. Vallejo, CA.
- *Warnock, N. 1999. *Regional planning for the United States Shorebird Conservation Plan*. Western working group meeting of Partners in Flight, San Diego, CA.
- *Warnock, N., and T. Mader. 1999. *Current status of San Clemente Loggerhead Shrike*. 1999 San Clemente Loggerhead Shrike Symposium, San Diego, CA.
- Garcelon, D., N. Warnock, J. Opdycke, and K. Brock. 2000. *Conservation efforts to restore the endangered San Clemente Loggerhead Shrike*. American Ornithological Union, St. Johns, Newfoundland.
- *Warnock, N., D. Shuford and K. Molina. 2000. *Importance of the Salton Sea to waterbirds of the Pacific Flyway*. Salton Sea Symposium, Desert Hot Springs, CA.
- *Warnock, N, T. Mader, and D. Garcelon. 2000. *Conservation of wild and reintroduced San Clemente Loggerhead Shrikes*. Wildlife Society Meeting, Western Section, Riverside, CA
- Warnock, N., G. Page, M. Ruhlen, C. Hickey, N. Nur, and J. Takekawa. 2000. *Westerns, waterbirds, and salt ponds along the Pacific Flyway: a critical relationship?* Western Sandpiper meeting, Vancouver, BC.
- Warnock, N., G. Page, M. Ruhlen, C. Hickey, N. Nur, and J. Takekawa. 2000. *Natural vs. unnatural habitat: the role of salt ponds in the conservation of Pacific Flyway waterbirds*. Waterbirds meeting, Plymouth, MA and San Francisco Bay Joint Ventures Board meeting, Tiburon, CA.

- *Warnock, N., C. Hickey, G. Page, W. D. Shuford, and S. Brown. 2001. *U.S. Shorebird Conservation: status and implementation of regional and national plans*. Wildlife Society Meeting, Western Section, Sacramento, CA.
- *Warnock, N. 2001. *Conservation of an endangered species: population monitoring and reintroductions of the San Clemente Loggerhead Shrike*. Avian Studies Group, San Francisco, CA.
- *Warnock, N. (featured speaker). 2001. *Shorebird migration along the Pacific Flyway*. Godwit Days, Spring Migration Festival, Arcata, CA.
- Warnock, N., A. Blackford, H. Carlisle, D. Garcelon, J. Opdycke, and K. Brock. 2001. *Population dynamics of endangered wild and reintroduced San Clemente Loggerhead Shrikes*. Society for Conservation Biology, Hilo, HI.
- *Warnock, N., G. Page, N. Nur, J. Takekawa, and J. Hanson. 2001. *Bird populations in San Francisco Bay: What does the future hold?* San Francisco State of the Estuary Conference, San Francisco, CA.
- *Warnock, N. 2001. *Lessons in species recovery: the case of the endangered San Clemente Loggerhead Shrike*. University of Missouri
- *Warnock, N. 2002. *Birds of the Salton Sea: past, present, and future*. Salton Sea Symposium, Indian Wells, CA.
- *Warnock, N. 2002. *Shorebird migration along the Pacific Flyway*. Western Hemisphere Shorebird Reserve Network and Manomet Observatory, Shorebird Management workshop, Los Banos, California (pending).

* Invited Talks

Grants and Contracts

- 2002 Department of Defense, US Navy, *Population monitoring of the San Clemente Island Loggerhead Shrike*: \$318,297
- 2001 Department of Defense, US Navy, *Population monitoring of the San Clemente Island Loggerhead Shrike*: \$375,822
- 2001 United States Fish and Wildlife Service, Ecological Services, San Francisco Bay Program, *Radiotelemetry study of the spring migration of Dunlin and dowitchers*: \$7,200
- 2000 Gabilan Foundation, *San Francisco Bay project*, \$300,000 (with Gary Page, Nadav Nur and William Sydeman)
- 2000 Department of Defense, US Navy, *Loggerhead Shrike telemetry*, \$23,003 (with David Bird)
- 2000 Department of Defense, US Navy, *Population monitoring of the San Clemente Island Loggerhead Shrike*: \$335,007
- 2000 United States Geological Survey, for the U.S. Shorebird Conservation Plan, *Shorebird conservation units: subspecies and distinct population segments*: \$4,000
- 2000 United States Fish and Wildlife Service, Ecological Services, San Francisco Bay Program, *Radiotelemetry study of the spring migration of Dunlin and dowitchers*: \$8,400
- 1999, 1998 Department of Defense, US Navy, *Population monitoring of the San Clemente Island Loggerhead Shrike*: \$485,427
- 1999 U.S. Environmental Protection Agency grant # R826552-01-0 through Salton Sea Authority, *Avifauna of the Salton Sea: annual phenology, numbers, and distribution*: \$208,870.
- 1996 United States Department of Agriculture, Forest Service, Cordova Ranger District and Copper River Delta Institute, *Analysis and publication of Western Sandpiper migration data*: \$16,475
- 1996 United States Fish and Wildlife Service, Don Edwards San Francisco Bay National Wildlife Refuge, *Data analysis and report on spring migration of Western Sandpipers passing through San Francisco Bay*: \$2,300.00.
- 1996, 1995 United States Fish and Wildlife Service, Region 1, Nongame Migratory Bird Program, *Radiotelemetry study of the spring migration of Western Sandpipers*: \$14,000 (1995), \$13,800 (1996) (with M.A. Bishop).
- 1996, 1995 United States Fish and Wildlife Service, Ecological Services, San Francisco Bay Program, *Radiotelemetry study of the spring migration of Western Sandpipers*: \$6,000 (1995), \$6,270 (1996) (with M.A. Bishop).

1996, 1995 Canadian Wildlife Service/NSERC Wildlife Ecology Research Program, *Radiotelemetry study of the spring migration of Western Sandpipers*: \$4,500 (1995), \$4,250 (1996) (with M.A. Bishop).
1995 National Fish and Wildlife Foundation, *Radiotelemetry study of the spring migration of Western Sandpipers*: \$15,000.00 (with M.A. Bishop).
1995 United States Fish and Wildlife Service, Region 7, Coastal Marine Bird Program, *Radiotelemetry study of the spring migration of Western Sandpipers*: \$5,000 (with M.A. Bishop).
1995 Skaggs Foundation, *Radiotelemetry study of the spring migration of Western Sandpipers*: \$5,000.00 (with M.A. Bishop).
1995 Chase Wildlife Foundation, *Radiotelemetry study of the spring migration of Western Sandpipers*: \$4,000 (with M.A. Bishop).
1990, 1989 University of California, Davis Intercampus Research Grant, *A preliminary study of the distribution of Dunlin - a radiotelemetry approach*: \$1,000 (1989), \$720 (1990).
1992, 1991, 1990, 1989, 1988 San Diego State University Graduate Teaching Associate Appointment, *Biotic and abiotic factors affecting the distribution and abundance of Dunlin*: \$8000.00 (1988/89), \$8700.00 (1989/90), \$9600 (1990/91), \$10,200 (1991/92).
1989, 1988 San Diego State University Tuition/Fees Doctoral Scholarship Grant, *Biotic and abiotic factors affecting the distribution and abundance of Dunlin*: \$510 (1988), \$1,900 (1989).

Awards

US. Forest Service National Wetland Conservation TAKING WING Award (1997) in the category of Investigations, for the best study on the management of waterfowl and wetland wildlife on National Forest System lands.
US. Forest Service National Wetland Conservation TAKING WING Award (2001) in the category of Capacity Building
Student Travel Award, Colonial Waterbird Society, Arles, France 1993
Associate Member - Sigma Xi

Other Scientific Accomplishments

Reviewer for *Ardea*, *Auk*, *Biodiversity and Conservation*, *Condor*, *Ecology*, *Ecological Applications*, *Ibis*, *International Wader Studies* (co-editor, issue 9), *Journal of Applied Ecology*, *Journal of Avian Biology*, *Journal of Environmental Management*, *Journal of Field Ornithology*, *Journal of Wildlife Management*, *Observer* (co-editor, Number 126), *Wader Study Group Bulletin*, *Wildlife Monographs* (consulting editor, issue 140), *Western Birds*
U.S. Fish and Wildlife Service Master Bird Banding Permit # 22680
North American Banding Council Trainer
Scientific advisory committee for the San Francisco Bay Bird Observatory, Alviso, CA
Member of Research and Monitoring Group for the US Shorebird Conservation Plan.
Advisory member for the Mexico Shorebird Conservation Plan.
Member of scientific advisory board of Western Hemisphere Shorebird Reserve Network, Manomet, MA.
Science team member of Waterbirds and Shorebirds panel for the Interior Columbia Basin Ecosystem Management Plan, Forest Service, U. S. Department of Agriculture.
Shorebirds Expert Panel for the Wildlife Habitats and Species Associations in Oregon and Washington project. Washington Department of Fish and Wildlife
Focus team member for the San Francisco Bay Area Wetlands Ecosystem Goals Project, San Francisco Estuary Project, Oakland, CA
Member of the Western Sandpiper Research Group, Burnaby, BC.
Member IUCN Species Survival Council: Reintroduction and Conservation Breeding Specialist groups

Professional Associations

American Ornithological Society
Wader Study Group
Australasian Wader Study Group

Western Wildlife Society

